

LPDES PERMIT NO. LA0062090, AI No. 14535**LPDES STATEMENT OF BASIS**

FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. Company/Facility Name:** INEOS Fluor Americas LLC
St. Gabriel Plant
P.O. Box 30
St. Gabriel, LA 70776
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. Prepared By:** Jenniffer Sheppard
Industrial Permits Section
Water Permits Division
Phone #: 225-219-3138
E-mail: jenniffer.sheppard@la.gov

Date Prepared: September 17, 2007

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed reissuance of an Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

- B. NPDES permit -** NPDES permit effective date: N/A
NPDES permit expiration date : N/A
EPA has not retained enforcement authority.
- C. LPDES permit -** LPDES permit effective date: February 1, 2003
LPDES permit expiration date : January 31, 2008

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- D. Application received on July 31, 2007.

V. Facility Information:

- A. Location - 4990B ICI Road in St. Gabriel

- B. Applicant Activity -

According to the application, INEOS Fluor Americas LLC, St. Gabriel Plant, is a specialty organic chemical manufacturing facility which manufactures 1,1,1,2-tetrafluoroethane (HFC-134a) and hydrochloric acid.

The adjacent facility, Syngenta Crop Protection Inc. (LA0005487, AI2367), accepts and discharges various non-process wastewaters for INEOS including, but not necessarily limited to sanitary wastewater, miscellaneous utility and maintenance waters, and non-process area storm water.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Organic Chemicals, Plastics,
 and Synthetic Fibers
 Process Flow - 0.1327 MGD

Reference

40 CFR 414
 Subparts H and J

Inorganic Chemicals-
 Hydrochloric Acid Production Category

40 CFR 415, Subpart G(*)

(*) [RESERVED SUBPART] - No effluent guidelines have been promulgated under this Subpart at this time.

Other sources of technology based limits:

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).
 Best Professional Judgement

- D. Fee Rate -
 1. Fee Rating Facility Type: Minor
 2. Complexity Type: VI
 3. Wastewater Type: II
 4. SIC code: 2869 and 2819
- E. Continuous Facility Effluent Flow - 2.04 MGD.

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VI. Receiving Waters:

Bayou Braud(Outfalls 005, 006, and 007)

1. River Basin: Lake Pontchartrain, Segment No. 040201
2. Designated Uses:

The designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Mississippi River(Outfalls 003 and 004)

1. TSS (15%), mg/L: 32.0
2. Average Hardness, mg/L CaCO_3 : 153.4
3. Critical Flow, cfs: 141955
4. Mixing Zone Fraction: 0.333333
5. Harmonic Mean Flow, cfs: 366748
6. River Basin: Mississippi River, Segment No. 070301
7. Designated Uses:

The designated uses are primary contact recreation, secondary contact recreation, fish and wildlife propagation and drinking water supply.

Information based on the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11;/Recommendation(s) from the Engineering Section. Hardness and 15% TSS data for Outfalls 003 and 004 come from monitoring station #319 on the Mississippi River at Plaquemine Ferry Landing, east of Plaquemine, Louisiana and listed in Hardness and TSS Data for All LDEQ Ambient Stations for the Period of Record as of March 1998, LeBlanc. This information was presented in a memorandum from Will Barlett to Jennifer Sheppard dated September 17, 2007, and is attached in Appendix C of this Statement of Basis.

VII. Outfall Information:

Outfall 003

- A. Type of wastewater - the discharge of process wastewater including HFC-134a wastewater, thermal oxidizer blowdown, off spec HCL wastewater, lime slurry wastewater, pH polishing wastewater (caustic or acid), process area stormwater and miscellaneous maintenance wastewaters from storage tanks including hydrostatic test water, equipment and pad wash water, steam condensate, safety shower and eye wash water, container rinsewaters, vessel and pipe cleaning liquids, and fire pump test water; and utility wastewater including regenerant wastewater, liquid flocculants, and as an alternate route for boiler blowdown and/or cooling tower blowdown discharges when Outfall 004 is out of service.
- B. Location - at the point of discharge from the carbon bed located near the solids handling building prior to commingling with any other waters, at Latitude 30°14'09", Longitude 91°05'48".
- C. Treatment - treatment of process wastewaters consists of:
 - HF absorber and metal reduction blowdown
 - organic removal
 - equalization/neutralization
 - clarification

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- solids removal
- filtration

Treatment of HF Absorber and Metal Reduction Unit consists of:

- metals reduction treatment
- organics removal (carbon beds)
- equalization/neutralization
- clarification
- solids removal
- filtration

Treatment of thermal oxidizer blowdown consists of:

- equalization/neutralization
- clarification
- solids removal
- filtration

Treatment of off-spec acidic waste consists of:

- equalization/neutralization
- clarification
- solids removal
- filtration

Treatment of process area stormwater and miscellaneous maintenance waters consists of:

- routing through the HF Absorber and Metal Reduction Unit

Treatment of softener/dealkalyzer regenerant water consists of:

- equalization/neutralization
- clarification
- solids removal
- filtration

D. Flow - Continuous Flow 0.152 MGD.

Process Wastewater*	0.1327 MGD
Utility Wastewater*	0.0193 MGD

* Specific component waste streams are defined at Appendix A-1 and Appendix D.

E. Receiving waters - Mississippi River via a pipe

F. Basin and segment - Mississippi River Basin, Segment 070301

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Outfall 004

- A. Type of wastewater - the discharge of utility wastewater including cooling tower blowdown, boiler blowdown, pH adjustment (acid) discharges, and as an alternate route for regenerant wastewater discharges when Outfall 003 is out of service.
- B. Location - at the point of discharge from the pH adjustment unit prior to combining with any other waters, at Latitude 30°14'09", Longitude 91°05'48".
- C. Treatment - treatment of utility wastewaters consists of:
- pH adjustment
- D. Flow - Continuous, (Max 30-Day) 0.052 MGD.
- E. Receiving waters - Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070301

Outfall 005

- A. Type of wastewater - the discharge of non-process area stormwater runoff.
- B. Location - at the point of discharge from the culvert located southeast of the catalyst handling building prior to combining with any other waters, at Latitude 30°14'05", Longitude 91°05'46".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Braud via unnamed drainage ditch
- F. Basin and segment - Lake Pontchartrain Basin, Segment 040201

Outfall 006

- A. Type of wastewater - the discharge of non-process area stormwater runoff.
- B. Location - at the point of discharge from the ditch located near the southeast corner of the construction area parking lot prior to combining with any other waters, at Latitude 30°14'00", Longitude 91°05'51".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Braud via unnamed drainage ditch
- F. Basin and segment - Lake Pontchartrain Basin, Segment 040201

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Outfall 007

- A. Type of wastewater - the discharge of non-process area stormwater runoff, fire protection wastewater, safety shower discharges, eyewash water, and previously monitored effluent from Internal Outfall 107.
- B. Location - at the point of convergence of the ditches on the north and south side of the railroad tracks, located southeast of the railroad tracks near the northeast corner of the property, prior to combining with any other waters, at Latitude 30°14'07", Longitude 91°05'42".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Braud via unnamed drainage ditch
- F. Basin and segment - Lake Pontchartrain Basin, Segment 040201

Internal Outfall 107

- A. Type of wastewater - the discharge of non-process area stormwater runoff, fire protection wastewater, safety shower discharges, eyewash water, and overflow from the HF & HCl Railcar and truck washing activities.
- B. Location - at the point of discharge from the culvert from the HF rail unloading and HCl loading sump, prior to commingling with Final Outfall 007, at Latitude 30°14'08", Longitude 91°05'43".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Braud via Final Outfall 007
- F. Basin and segment - Lake Pontchartrain Basin, Segment 040201

VIII. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current LPDES Permit:

- A. Outfall 003 - Limitations have decreased based on a decrease in flow from 0.225 MGD to 0.152 MGD. The limitations were calculated in accordance with the OCPSF Effluent Guidelines at 40 CFR, Part 414, Subparts H and J.

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IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

1. Outfall 003 - Process Wastewater

***Outfall 003** - the discharge of process wastewater including HFC-134a wastewater, thermal oxidizer blowdown, off spec HCL wastewater, lime slurry wastewater, pH polishing wastewater (caustic or acid), process area stormwater and miscellaneous maintenance wastewaters from storage tanks including hydrostatic test water, equipment and pad wash water, steam condensate, safety shower and eye wash water, container rinsewaters, vessel and pipe cleaning liquids, and fire pump test water; and utility wastewater including regenerant wastewater, liquid flocculants, and as an alternate route for boiler blowdown and/or cooling tower blowdown discharges when Outfall 004 is out of service.

INEOS Fluor Americas LLC, St. Gabriel Plant is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

<u>Manufacturing Operation</u>	<u>Guideline</u>
Organic chemical manufacturing	40 CFR 414, Subpart(s) (H), and (J).

Calculations and basis of permit limitations are found at Appendix A and associated appendices. See below for site-specific considerations.

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(lbs/day)</u>	<u>DAILY MAXIMUM</u> <u>(lbs/day)</u>
Flow (MGD)	Report	Report
pH	6.0	9.0
BOD ₅	52	138
TSS	65	210
Total Chromium	1.23	3.07
Total Zinc	1.16	2.89
Total Fluoride	58.66	121.74
Total Arsenic	1.11	3.32
Acrylonitrile	0.10	0.26
Benzene	0.06	0.15
Carbon Tetrachloride	0.16	0.42
Chlorobenzene	0.16	0.42
Chloroethane	0.12	0.33
Chloroform	0.12	0.36
1,1-Dichloroethane	0.02	0.07
1,2-Dichloroethane	0.20	0.64
1,1-Dichloroethylene	0.02	0.07
1,2-trans-Dichloroethylene	0.03	0.07
1,2-Dichloropropane	0.22	0.88
1,3-Dichloropropylene	0.22	0.88
Ethylbenzene	0.16	0.42
Methyl Chloride	0.12	0.33
Methylene Chloride	0.04	0.19
Tetrachloroethylene	0.06	0.18
Toluene	0.03	0.08
1,1,1-Trichloroethane	0.02	0.07

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(lbs/day)</u>	<u>DAILY MAXIMUM</u> <u>(lbs/day)</u>
1,1,2-Trichloroethane	0.04	0.14
Trichloroethylene	0.03	0.08
Vinyl Chloride	0.11	0.19
2,4-Dimethylphenol	0.02	0.05
4,6-Dinitro-o-Cresol	0.09	0.31
2,4-Dinitrophenol	1.34	4.75
2-Nitrophenol	0.07	0.26
4-Nitrophenol	0.18	0.64
Phenol	0.02	0.05
Acenaphthene	0.02	0.05
Acenaphthylene	0.02	0.05
Anthracene	0.02	0.05
Benzo (a) anthracene	0.02	0.05
Benzo (a) pyrene	0.02	0.05
3,4-Benzofluoranthene	0.02	0.05
Benzo(k)fluoranthene	0.02	0.05
Bis(2-ethylhexyl)phthalate	0.11	0.29
Chrysene	0.02	0.05
1,2-Dichlorobenzene	0.22	0.88
1,3-Dichlorobenzene	0.16	0.42
1,4-Dichlorobenzene	0.16	0.42
Diethyl phthalate	0.05	0.13
Dimethyl phthalate	0.02	0.05
Di-n-butyl phthalate	0.02	0.05
Fluoranthene	0.02	0.06
Fluorene	0.02	0.05

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PARAMETER	MONTHLY AVERAGE (lbs/day)	DAILY MAXIMUM (lbs/day)
Hexachlorobenzene	0.22	0.88
Hexachlorobutadiene	0.16	0.42
Hexachloroethane	0.22	0.88
Naphthalene	0.02	0.05
Nitrobenzene	2.48	7.09
Phenanthrene	0.02	0.05
Pyrene	0.02	0.05
1,2,4-Trichlorobenzene	0.22	0.88

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored continuously.

PH - established in accordance with LAC 33:IX.1113.C.1. Ph shall be monitored continuously.

Total Fluoride - Limitations were established based on BPJ using the Inorganic Chemical Development Document Tables 12-21 and Table 15-15. The basis for effluent limitation development has been retained from the current LPDES permit, effective on February 1, 2003.

Total Arsenic - Limitations were established based on BPJ of 40 CFR 415.623. The basis for effluent limitation development has been retained from the current LPDES permit, effective on February 1, 2003.

BOD₅, TSS, Total Chromium, Total Zinc, Acrylonitrile, Benzene, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, 1,2-trans-Dichloroethylene, 1,2-Dichloropropane, 1,3-Dichloropropylene, Ethylbenzene, Methyl Chloride, Methylene Chloride, Tetrachloroethylene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, 2,4-Dimethylphenol, 4,6-Dinitro-o-Cresol, 2,4-Dinitrophenol, 2-Nitrophenol, 4-Nitrophenol, Phenol, Acenaphthene, Acenaphthylene, Anthracene, Benzo (a) anthracene, Benzo (a) pyrene, 3,4-Benzofluoranthene, Benzo(k)fluoranthene, Bis(2-ethylhexyl)phthalate, Chrysene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachloroethane, Naphthalene, Nitrobenzene, Phenanthrene, Pyrene, and 1,2,4-Trichlorobenzene - Monthly Average and Daily Maximum limitations for these parameters have been established to ensure compliance with the OCPSF Guidelines under 40 CFR Part 414, Subparts H and J.

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2. Outfall 004 - Utility Wastewaters

***Outfall 004** - utility wastewater including cooling tower blowdown, boiler blowdown, pH adjustment (acid) discharges, and as an alternate route for regenerant wastewater discharges when Outfall 003 is out of service.

Utility wastewaters being discharged to discrete outfalls receive BPJ limitations/monitoring requirements according to the following schedule:

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>MG/L</u>	<u>DAILY MAXIMUM</u> <u>MG/L</u>
Flow, MGD	Report	Report
pH (s.u.)	6.0	9.0
TOC	---	50
Oil & Grease	---	15

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored continuously.

PH - established in accordance with LAC 33:IX.1113.C.1. Ph shall be monitored continuously.

TOC and Oil & Grease - These limitations were retained from the current LPDES permit, effective on February 1, 2003 and have been applied based on similarly permitted discharges and best professional judgment (BPJ).

3. Outfall(s) 005, 006, 007, and 107 - Stormwater & Utility

***Outfalls 005 and 006** - the discharge of non-process area stormwater runoff.

***Outfall 007** - the discharge of non-process area stormwater runoff, fire protection wastewater, safety shower discharges, eyewash water, and previously monitored effluent from Internal Outfall 107.

***Internal Outfall 107** - the discharge of non-process area stormwater runoff, fire protection wastewater, safety shower discharges, eyewash water, and overflow from the HF & HCl Railcar and truck washing activities.

Uncontaminated or low potential contaminated stormwater and miscellaneous utility wastewaters from Outfalls 005, 006, 007, and 107 discharged through discrete outfall(s) not associated with process wastewater shall receive the following BPJ limitations in accordance with this Office's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).

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<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>MG/L</u>	<u>DAILY MAXIMUM</u> <u>MG/L</u>
Flow, MGD	Report	Report
pH (s.u.)	6.0	9.0
TOC	---	50
Oil & Grease	---	15

Site-Specific Consideration(s) for Outfalls 005, 006, 007, and 107

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

PH - established in accordance with LAC 33:IX.1113.C.1.

TOC and Oil & Grease - These limitations were retained from the current LPDES permit, effective on February 1, 2003 and have been applied based on similarly permitted discharges and best professional judgment (BPJ).

In accordance with LAC 33:IX.2707.I.3 and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. Calculations, results, and documentation are given in Appendix B.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

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The following pollutants received water quality based effluent limits:

PARAMETER(S)
None

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. They are also listed in Part II of the permit.

TMDL Waterbodies

Outfall 003 and 004

The discharges from outfalls 003 and 004 include process wastewater, process area stormwater, maintenance wastewater, utility wastewater, laboratory wastewater, equipment decontamination cleaning water, deluge system fire fighting water, cooling tower blowdown, boiler blowdown, and regenerant water are to Mississippi River via a pipe, Segment No. 070301. The Mississippi River is not listed on the 303(d) report as being impaired. Therefore, no additional requirements have been established in this permit.

Outfalls 005, 006, 007, and 107

The discharges from outfalls 003 and 004 include low contamination potential stormwater, fire protection water, safety shower water, eyewash water, and overflow from the HR & HCl Railcar and truck washing activity wastewater are to Bayou Braud via an unnamed ditch, Segment No. 040201. Bayou Braud is listed on the 303(d) report as being impaired with ammonia, phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, and TDS/chlorides/sulfates. A TMDL is scheduled to be completed by March 31, 2011. Based on the evaluation of effluent discharges and reported data in the application, the facility has no reasonable potential to impact ammonia, phosphorus, nitrogen, pathogen indicators, and TDS/chlorides/sulfates.

Organic enrichment/low DO

TOC is a means of measuring organic materials in a discharge, therefore, the daily maximum limit of 50 mg/L TOC has been retained from the current LPDES permit effective on February 1, 2003 for all outfalls.

Monitoring frequencies for water quality based limited parameters are established in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

Site-Specific Consideration(s)

None

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D. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(i)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

1. Outfall 003 - Process Wastewaters

***Outfall 003** - the discharge of process wastewater including HFC-134a wastewater, thermal oxidizer blowdown, off spec HCL wastewater, lime slurry wastewater, pH polishing wastewater (caustic or acid), process area stormwater and miscellaneous maintenance wastewaters from storage tanks including hydrostatic test water, equipment and pad wash water, steam condensate, safety shower and eye wash water, container rinsewaters, vessel and pipe cleaning liquids, and fire pump test water; and utility wastewater including regenerant wastewater, liquid flocculants, and as an alternate route for boiler blowdown and/or cooling tower blowdown discharges when Outfall 004 is out of service.

Flow and pH shall be monitored continuously. These monitoring frequencies were retained from the current LPDES permit, effective on February 1, 2003.

<u>PARAMETER(S)</u>	<u>MONITORING FREQUENCY</u>
Flow	Continuous
pH	Continuous

TSS, Total Fluoride, Total Chromium, Total Zinc, and Total Arsenic - The frequency for these parameters has been established at 2/month and is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. These monitoring frequencies were retained from the current LPDES permit, effective on February 1, 2003.

<u>PARAMETER(S)</u>	<u>MONITORING FREQUENCY</u>
TSS	2/month
Total Fluoride	2/month
Total Chromium	2/month
Total Zinc	2/month
Total Arsenic	2/month

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BOD₅ - a frequency of 1/quarter has been established for this parameter. This monitoring frequency has been retained from the current LPDES permit, effective on February 1, 2003.

PARAMETER(S)	MONITORING FREQUENCY
BOD ₅	1/quarter

Acrylonitrile, Benzene, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, 1,2-trans-Dichloroethylene, 1,2-Dichloropropane, 1,3-Dichloropropylene, Ethylbenzene, Methyl Chloride, Methylene Chloride, Tetrachloroethylene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, 2,4-Dimethylphenol, 4,6-Dinitro-o-Cresol, 2,4-Dinitrophenol, 2-Nitrophenol, 4-Nitrophenol, Phenol, Acenaphthene, Acenaphthylene, Anthracene, Benzo (a) anthracene, Benzo (a) pyrene, 3,4-Benzofluoranthene, Benzo(k)fluoranthene, Bis(2-ethylhexyl)phthalate, Chrysene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachloroethane, Naphthalene, Nitrobenzene, Phenanthrene, Pyrene, and 1,2,4-Trichlorobenzene - Toxic pollutants not expected to be on-site are proposed to be monitored once per year. These monitoring frequencies were retained from the current LPDES permit, effective on February 1, 2003.

PARAMETER(S)	MONITORING FREQUENCY
Acrylonitrile	1/ year
Benzene	1/ year
Carbon Tetrachloride	1/year
Chlorobenzene	1/year
Chloroethane	1/ year
Chloroform	1/year
1,1-Dichloroethane	1/ year
1,2-Dichloroethane	1/ year
1,1-Dichloroethylene	1/ year
1,2-trans-Dichloroethylene	1/ year
1,2-Dichloropropane	1/year
1,3-Dichloropropylene	1/year
Ethylbenzene	1/ year
Methyl Chloride	1/ year

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PARAMETER(S)	MONITORING FREQUENCY
Methylene Chloride	1/ year
Tetrachloroethylene	1/ year
Toluene	1/ year
1,1,1-Trichloroethane	1/ year
1,1,2-Trichloroethane	1/ year
Trichloroethylene	1/ year
Vinyl Chloride	1/ year
2,4-Dimethylphenol	1/ year
4,6-Dinitro-o-cresol	1/ year
2,4-Dinitrophenol	1/ year
2-Nitrophenol	1/ year
4-Nitrophenol	1/ year
Phenol	1/ year
Acenaphthene	1/ year
Acenaphthylene	1/ year
Anthracene	1/ year
Benzo (a) anthracene	1/ year
Benzo (a) pyrene	1/ year
3,4-Benzofluoranthene	1/ year
Benzo(k)fluoranthene	1/ year
Bis(2-ethylhexyl)phthalate	1/ year
Chrysene	1/ year
1,2-Dichlorobenzene	1/ year
1,3-Dichlorobenzene	1/ year
1,4-Dichlorobenzene	1/ year
Diethyl phthalate	1/ year
Dimethyl phthalate	1/ year

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PARAMETER(S)	MONITORING FREQUENCY
Di-n-butyl phthalate	1/ year
Fluoranthene	1/ year
Fluorene	1/ year
Hexachlorobenzene	1/ year
Hexachlorobutadiene	1/ year
Hexachloroethane	1/ year
Naphthalene	1/ year
Nitrobenzene	1/ year
Phenanthrene	1/ year
Pyrene	1/ year
1,2,4-Trichlorobenzene	1/ year

2. Outfall 004 - Utility Wastewaters

***Outfall 004** - utility wastewater including cooling tower blowdown, boiler blowdown, pH adjustment (acid) discharges, and as an alternate route for regenerant wastewater discharges when Outfall 003 is out of service.

Utility wastewater pollutants being discharged to discrete outfalls shall receive monitoring frequencies according to the following schedule:

Flow and pH shall be monitored continuously. These monitoring frequencies were retained from the current LPDES permit, effective on February 1, 2003.

PARAMETER(S)	MONITORING FREQUENCY
Flow	Continuous
pH	Continuous

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TOC and Oil & Grease - The frequency for these parameters has been established at 1/month. These monitoring frequencies were retained from the current LPDES permit, effective on February 1, 2003.

PARAMETER(S)	MONITORING FREQUENCY
TOC	1/month
Oil & Grease	1/month

3. Outfall(s) 005, 006, 007, and 107 - Stormwater & Utility

***Outfalls 005 and 006** - the discharge of non-process area stormwater runoff.

***Outfall 007** - the discharge of non-process area stormwater runoff, fire protection wastewater, safety shower discharges, eyewash water, and previously monitored effluent from Internal Outfall 107.

***Internal Outfall 107** - the discharge of non-process area stormwater runoff, fire protection wastewater, safety shower discharges, eyewash water, and overflow from the HF & HCl Railcar and truck washing activities.

Non-process area stormwater and utility wastewater that is uncontaminated or has a low potential of contamination and is discharged at a discrete outfall, will receive monitoring frequencies according to the following schedule:

Flow, pH, TOC and Oil & Grease - The frequency for these parameters has been established at 1/quarter. These monitoring frequencies were retained from the current LPDES permit, effective on February 1, 2003.

PARAMETER(S)	MONITORING FREQUENCY
Flow	1/quarter
pH	1/quarter
TOC	1/quarter
Oil & Grease	1/quarter

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X. Compliance History/DMR Review :

A compliance history/DMR review was done covering the period of January 2004 to August 2007.

A. DMR Excursions Reported

<u>DATE</u>	<u>PARAMETER</u>	<u>OUTFALL</u>	<u>REPORTED VALUE</u>	<u>PERMIT LIMITS</u>
N/A				

B. Inspections - A facility inspection was conducted on April 16, 2004. The following items were noted in the inspection report:

- a. Effluent/Receiving Waters - February-December, 2003, DMR's were reviewed. There were no reported exceedances/violations during the interval.
- b. Self-Monitoring Program-The Outfall 003 autosampler is set to collect sample aliquots at predetermined flow volume intervals. The sampler is not checked to verify that aliquots are collected at the set volume interval, i.e. sampler calibration incomplete. Acid/Base Neutral compounds (sampled annually) are collected in a plastic jug at Outfall 003. The sample holding refrigerator temperature log contained numerous 6 & 7 degree C entries. pH sample holding times were routinely exceeded for pH grab samples collected at Outfalls 005,006, 007 and 701.
- c. Laboratory-pH standards (4.0 & 10.0 s.u.) used to calibrate continuous record pH equipment at Outfalls 003 & 004 were dated - pH 4.0 s.u., use before March 11, 2004; pH 10.0 s.u., use before July 23, 2003. The TSS oven was usually operated above the 103-105 degree C acceptable range. Oven temperature ranged from 104-114 degree C. TSS pre and post filtration constant weights were not being arrived at. This requirement was written in the facility's SOP for TSS analysis but was not being followed. Lab Control Standards were not being run.

C. Compliance History - None

XI. "IT" Questions - Applicant's Responses

INEOS Fluor Americas LLC is a minor facility, therefore, IT Questions were not required to be submitted.

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XII. ENDANGERED SPECIES

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which are listed as an endangered species. This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). The FWS review will occur concurrent with the public notice. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XV. Variances:

No requests for variances have been received by this Office.

XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List